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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,390	09/14/2004	Willem Van Dijk	2005-1025	9012

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EXAMINER	
CHEN, CATHERYNE	
ART UNIT	PAPER NUMBER
1655	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/500,390	VAN DIJK ET AL.	
	Examiner	Art Unit	
	CATHERYNE CHEN	1655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 December 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *27-44,48-50 and 52* is/are pending in the application.

4a) Of the above claim(s) *31-34,38 and 40* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *27-30, 35-37, 39, 41-44, 48-50, 52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Currently, Claims 27-44, 48-50, 52 are pending. Claims 27-30, 35-37, 39, 41-44, 48-50, 52 are examined on the merits.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on Dec. 10, 2007 has been entered.

Election/Restrictions

Applicant's election without traverse of Group I (Claims 27-30, 35-37, 41-44, 48-50, newly added 52) and the species plant in the reply filed on Jan. 18, 2007 is acknowledged. Claims 1-26, 45-47, 51 are canceled. Claims 31-34, 38, 40 are withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 27-30, 35-37, 39, 42-44, 48-49, 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farkas (US 3360511) and Vittori (US 6482942 B1).

Farkas teaches aloe polysaccharide containing composition for skin wound treatments as lotions, creams, ointments (column 1, lines 21-22, 30, 45-48), 35-40% glucose, 35-40% mannose, glucuronic acid (negative charged monosaccharide), molecular weight from about 430 KD to about 620 KD (column 2, lines 1-6, 15-17, 36-37), concentrations of the aloe polysaccharide may range from about 0.1% up to about 10% by weight (column 3, lines 31-35), product isolated by precipitation (column 3, line 54). However, it does not teach the claimed amounts for the composition and anion exchange column.

Vittori teaches a method of isolating a mucilaginous polysaccharide (Claim 1), from Aloe (Claim 3), where the polysaccharide comprises 80-85% mannose, 14-18% glucose (Claim 29), with anion exchange resin (Claim 37).

Farkas does not specifically teach aloe with specific amounts of mannose, glucose, and other monosaccharides. However, the extraction of aloe itself is intrinsic to contain the claimed amounts because both the reference and the claimed invention are using the same source for extracting the claimed amounts. Thus, on the extraction of aloe the range of amounts of mannose, glucose and monosaccharide would have to be present in the extract as claimed.

Thus, an artisan of ordinary skill would reasonably expect that ion exchange chromatography could be used as the types of process to isolate aloe components taught by the references. This reasonable expectation of success would motivate the artisan to use the process of Vittori in the reference composition. Thus, using anion exchange column is considered an obvious modification of the references.

Claims 27-30, 35-37, 39, 42-44, 48-50, 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shupe et al. (US 6290964 B1) and Vittori (US 6482942 B1).

Shupe et al. teaches anti-microbial agents from Aloe vera (column 1, line 17), as a gel or liquid to promote healing (column 4, lines 47, 60, 66), molecular weights approximately 550 KD have varying degrees of bactericidal or bacteriostatic activity (column 7, lines 10-13), chromatographic separation gels (column 7, line 24), composition in a pharmaceutical acceptable aqueous medium, injectable as liquid solutions or suspensions (column 14, lines 53, 67), solid forms for solutions as capsules and the like (column 15, lines 1, 20). However, it does not teach the claimed amounts for the composition and anion exchange column.

Vittori teaches a method of isolating a mucilaginous polysaccharide (Claim 1), from Aloe (Claim 3), where the polysaccharide comprises 80-85% mannose, 14-18% glucose (Claim 29), with anion exchange resin (Claim 37).

The reference does not specifically teach that amount of mannose, glucose and monosaccharides in particular from aloe. However, a person of ordinary skill in the art would reasonably expect that aloe intrinsically contain the polysaccharides. Based on

this reasonable expectation of success, a person of ordinary skill in the art would be motivated to use aloe.

The reference does not specifically teach aloe with specific amounts of mannose, glucose, and other monosaccharides. However, the extraction of aloe itself is intrinsic to contain the claimed amounts because both the reference and the claimed invention are using the same source for extracting the claimed amounts. Thus, on the extraction of aloe the range of amounts of mannose, glucose and monosaccharide would have to be present in the extract as claimed.

Thus, an artisan of ordinary skill would reasonably expect that ion exchange chromatography could be used as the types of process to isolate aloe components taught by the references. This reasonable expectation of success would motivate the artisan to use the process of Vittori in the reference composition. Thus, using anion exchange column is considered an obvious modification of the references.

Claims 27-30, 35-37, 41-44, 48-50, 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jia (US 2002/0071868 A1) and Vittori (US 6482942 B1).

Jia teaches topical and systemic anti-inflammatory activity of Aloe vera (paragraph 0006), pharmacologic agents of Aloe vera can be carried through epidermal barrier (paragraph 0006), complex carbohydrate preparation produced from the inner filet of the leaf of Aloe species (paragraph 0024), molecular weight of polysaccharides in range between 50-200 KD, monosaccharides contain galactose, glucose, mannose (paragraph 0026), biological vehicles may be administered orally with pharmaceutically

acceptable excipients in the form of capsules, tablets, soft gel capsules (paragraph 0034). However, it does not teach the claimed amounts for the composition and anion exchange column.

Vittori teaches a method of isolating a mucilaginous polysaccharide (Claim 1), from Aloe (Claim 3), where the polysaccharide comprises 80-85% mannose, 14-18% glucose (Claim 29), with anion exchange resin (Claim 37).

The reference does not specifically teach aloe with specific amounts of mannose, glucose, and other monosaccharides. However, the extraction of aloe itself is intrinsic to contain the claimed amounts because both the reference and the claimed invention are using the same source for extracting the claimed amounts. Thus, on the extraction of aloe the range of amounts of mannose, glucose and monosaccharide would have to be present in the extract as claimed.

Thus, an artisan of ordinary skill would reasonably expect that ion exchange chromatography could be used as the types of process to isolate aloe components taught by the references. This reasonable expectation of success would motivate the artisan to use the process of Vittori in the reference composition. Thus, using anion exchange column is considered an obvious modification of the references.

Conclusion

No claim is allowed.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catheryne Chen whose telephone number is 571-272-9947. The examiner can normally be reached on Monday to Friday, 9-5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terry McKelvey can be reached on 571-272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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